Tribal Infrastructure Task Force Meeting Summary December 20, 2011 2:00-3:30 PM

A. Introductions

Kaela Amaral, Horsley Witten Group, Inc.

Dana Baer, Indian Health Service (IHS) Sanitation Facilities Construction (SFC) Program Steve Bolin, IHS, Alaska

Jennifer Bullough, U.S. Department of Housing and Urban Development (HUD) Office of Native American Programs

Marta Burg, U.S. Environmental Protection Agency (EPA) Region 9 Tribal Caucus

Dave Clark, Rural Community Assistance Partnership (RCAP)

Lori Davis, U.S. Department of Agriculture (USDA)

Margaret Foley, Squaxin Island Tribe, Seattle, Washington

Sheila Frace, EPA Office of Water (OW), Office of Wastewater Management (OWM)

Greg Gwaltney, EPA, OW, OWM

David Harvey, EPA OW, Office of Ground Water and Drinking Water (OGWDW)

Kellie Kubena, EPA, OW, OWM

Shaun Livermore, Poarch Band of Creek Indians Utility Authority

Eric Matson, IHS SFC Program, Phoenix Area

John Mosley, Pyramid Lake Paiute Tribe

Hal Nielson, USDA

Stephen Poloncsik, EPA Region 5

Jacki Ponti, USDA

Charles Reddoor, EPA Office of Resource Conservation and Recovery (ORCR)

Dr. Michael Reed, Cocopah Indian Tribe

Linda Reeves, EPA Region 9

Matt Richardson, EPA, OW, OWM

Wayne Roepe, EPA ORCR

Ben Shuman, USDA

John Wheaton, Nez Perce Tribe

Felicia Wright, EPA, OW, OWM

B. Welcome and Introductions of Today's Speakers, and Finalization of Sustainable Goals & Concepts document (Sheila Frace)

Sheila welcomed everyone to the conference call and explained that the conference calls are focused on the topic of sustainability and have featured a number of excellent speakers on how sustainability is defined at the tribal level. Sheila thanked the previous speakers for the information they have shared and mentioned that the notes from their presentations have been sent out to meeting participants. This meeting features presentations from John Mosley of the Pyramid Lake Paiute Tribe, and Margaret Foley of the Squaxin Island Tribe to explore the topic of water infrastructure sustainability for tribes. Sheila also mentioned the Goals and Concepts document that has been developed and discussed during the last call. Comments were received, and the final version of the document was sent out by Matt Richardson.

C. Review of ITF Process Flow Chart, Distribution of Previous Meeting Notes, and Schedule for Future ITF Meetings (Matt Richardson)

Matt Richardson noted that a road map was sent out in an email to the participants and can be used to keep track of the group's progress. The Infrastructure Task Force (ITF) decided in the past year to modify the focus towards incorporating more sustainability. The ITF then developed the Goals and Concepts document. The Goals and Concepts document will then be used to develop an actions plan that includes tasks for all partied involved to achieve progress and to potentially modify how programs are run. Matt Richardson informed call participants that meeting notes were sent out in draft form, and any corrections can be sent to him. The next scheduled call will be on January 18, 2012.

D. Pyramid Lake Paiute Tribe Approach to Sustainability (John Mosley) and Potential Discussion Questions

David Harvey introduced John Mosley, the Environmental Director with the Pyramid Lake Paiute Tribe (PLPT). David Harvey has previously worked with the tribe developing water and sewer systems and recently visited the tribe to see the American Recovery and Reinvestment Act (ARRA) projects. David has previously talked with John about his efforts to improve the utility and how he is utilizing resources from the federal government to leverage his discussions with the tribal council. These efforts are to establish a utility that is sustainable and to address issues related to arsenic treatment.

1. General context of the PLPT community and water / wastewater utility (population served, number of systems, number of employees & do they have other responsibilities, etc)

John Mosley has been with the PLPT for about four and a half years. His department is charged with overseeing public utilities including drinking water, wastewater, and solid waste services. PLPT has about 1,350 residences for drinking water services. The tribe has three public water systems run by its utility and the systems are about 15 miles apart from each other. The utility operates two wastewater sewage lagoon ponds. One is located in Sutcliffe which is a smaller community, and the other is in Wadsworth which is a larger community. The utility also provides septic services to about 217 residences in the Nixon community and for approximately 20 additional homes throughout the reservation that could not connect to the sewer system. In the drinking water and wastewater utility, two dedicated staff members are focused on operation and maintenance (O&M) and on compliance with the Safe Drinking Water Act (SDWA). Two additional staff members work in the solid waste utility. The solid waste utility provides curbside pickup and landfill services, both of which are tribally operated.

2. What success and challenges are there with the current system of utility governance?

The largest day-to-day challenges are the lack of resources for small tribes. The limited resources result in a lack of staff to facilitate the O&M needs. The PLPT relies on IHS for technical assistance for addressing O&M concerns. The utility also frequently calls the IHS office in Reno to get advice and other assistance because they do not have an engineer on staff.

From 2003 to 2009, when the tribe took over the water and wastewater system, there was only one staff member to oversee all three of the public water systems. This was a difficult time for the tribe because they did not dedicate the necessary funding for the water system. Also, before that time, maintenance staff took care of the O&M for the water system. The charge of John's department is to build a program and the first task was to develop an ordinance to help regulate the utility and create a utility board.

Without adequate funding, the utility did not have the proper equipment or vehicles. Currently, the tribe does not have a supervisory control and data acquisition (SCADA) system in place. A SCADA system would be helpful due to the limited staff at the utility. From 2003 to 2009, the budget for the utility was around \$75,000 per year. When John first started, an initial goal was to increase the budget. John had to appeal to the tribal council to increase the budget for the utility. He was able to get the budget up to about \$200,000 per year, which now supports two full time staff members.

3. What challenges does the utility face in trying to provide safe drinking water and wastewater services in a sustainable manner?

Another charge for the utility was to address the arsenic problem in the Sutcliffe community. The 2006 the rule change for arsenic lowered allowable levels from 50 parts per billion (ppb) to 10 ppb. The utility's average level was around 14.5 ppb. At the time of the rule change, the tribe was not interested in building a treatment plant because it would increase O&M costs and the tribe could not afford these additional costs. The tribe received a grant from EPA to address this problem and to provide secondary treatment needed for manganese and iron levels that turned the water a "tea" color. John noted that as a public utility, having the water look like tea does not help the utility get customers to pay for services. The tribal council directed the water and wastewater department to find a grant and other resources to build a treatment plant to meet the SDWA standards for arsenic. John worked on a grant through the EPA SDWA tribal set aside. The tribe received the funding from EPA and went out to bid in summer 2011. The tribe did not have enough funding based on the three bids they received, so it is working with USDA rural development for additional funding.

4. Describe the steps the PLPT water utility has taken to develop an infrastructure asset management program. How has this work helped your utility and how long has this process taken?

The tribe has developed its own in-house MS-Access database for the water utility. The database contains information on consumer confidence reports (CCRs), compliance, asset registry, and includes a work order system that interacts with the budget. Everything in the database is related to the budget; for example, any purchase order for parts will also be accounted for in the budget, and related back to the work order.

The utility also developed a Geographic Information System (GIS) database that is separate from the Access database. This database uses Google Earth to digitize lines, create snapshots of components of the water systems included in the Access database to help facilitate asset management. For example, a hydrant in the system can be clicked on in the Access database, and the snapshot will open in Google Earth. Using these basic tools, the tribe is able to better

manage its assets on the ground. Also, the database contains a replacement schedule, and eventually the tribe wants to tie the assets to the GIS database and have a spatial reference for their infrastructure. To create the GIS database, the utility took the "as built" housing drawings from the 1970s and scanned and digitized these into GIS. The next step was to look at the age of the drawings, and determine the date the infrastructure was put in to understand when components need to be replaced or maintained. This was a daunting task for the utility because of the limited number of staff; it took several years to get the database to its current level.

5. Historically, how have user rates for drinking water and wastewater service been established? What factors are currently considered when setting user rates (e.g., salary cost, chemicals, energy, sampling, equipment replacement, and ability to pay)?

The water rate remained unchanged for many years. The rate was first set in 1983 at approximately \$5 a month and it was not changed until 2008. In 2008, a change was approved to increase the rate to \$10 a month. The utility is currently trying to increase the rate again and on a more regular basis. The tribe has an agreement with USDA Rural Development to increase rates to at least 1.5% of median household income. This would result in a rate of about \$32 per month for a residence and will provide funding for the utility to operate more sustainably.

The utility is currently subsidized by tribal funds, but the tribe wants to create an independent utility that can operate without subsidies. John mentioned that it is important for the utility to operate as a separate entity under the tribe, but apart from the tribe, to operate sustainably. The tribal council agrees and the utility's charge is to operate more sustainably. It is difficult to raise revenue for a system that has 1,350 connections and John expects the utility to continue to use a combination of federal and tribal funds to help with the capital replacement costs.

6. What changes are the PLPT considering with regard to user rates, to increase the sustainability of the infrastructure operation and maintenance services provided?

The utility is aiming for rates to be around 1.5% of the median household income, and is setting money aside for capital replacement for the drinking water treatment plant, which is another requirement of the USDA program. A capital replacement fund is important to address the regular O&M needs of the water treatment facility.

7. What steps has the PLPT taken to develop a governance structure for the utility? What is the status of those efforts? How do you envision the utility being governed in the future?

The public utility was established in 2003, before which there was an O&M utility created in 1978. There have been several different utility configurations, but the current one has weathered changes from the tribal council and is still functioning.

8. Which federal infrastructure assistance programs has the tribe used? What elements, if any, of these programs have helped you in developing your sustainability approach?

The tribe receives regular assistance from the local IHS office, on technical questions, reviewing schematics, and helping prescribe water treatment with chlorination. Other programs include the EPA Tribal Set Aside for funding infrastructure, and the USDA Rural Development for funding infrastructure and capital replacement.

9. What changes, if any, would you recommend making to federal infrastructure programs to assist tribes in developing a sustainable utility?

Don Bradford of the IHS California office spoke at the regional tribal conference about having sustainable utilities, during which it was proposed for the IHS to implement capital replacement for any equipment as soon as it exceeds its useful life. This would also require IHS to keep an up-to-date asset registry of equipment. Don provided an argument that this is in accordance with the public law that funds capital equipment for tribes. John Mosley mentioned that this is a different approach than what IHS is currently using; they only fund capital replacement if it is an emergency situation or a human health hazard. John believes this would create some sustainability for tribes, instead of putting the burden on them for replacing capital assets. John acknowledges that there are different thoughts on the subject, but coming from a small tribe's perspective, the reality is that tribes need to rely on the federal government for sustainability until they can develop other revenue sources to subsidize the utility.

Ouestions

David Harvey: What arguments did you need to make to increase the utility's budget? The argument John used was that all the money is used to benefit the community. The utility has real equipment needs and it needs a lot more funding to address all the issues it needs to address. The utility must address failing and degrading infrastructure. Water pipes are leaking in some areas. The system has older asbestos concrete pipes, where most of the water infrastructure failures lie. In certain areas, wetland vegetation is growing adjacent to these leaking pipes, which indicates they have been leaking for a long time. Also, by increasing the budget, the utility is able to provide more staff on the ground to address all of the needs.

Sheila Frace: Regarding the challenge of retaining staff where the budget does not keep pace with replacement needs; have you had difficulty retaining staff or has the staff been steady? John Mosley stated that the utility is fortunate to have the same staff members since 2003. To keep staff, John has argued for increased wages and supports the needs of staff members. John listens to what staff say about funding needs and takes these arguments to the tribal council to justify increases to the budget.

Sheila Frace: When the rate increase went into effect, was the tribal council supportive? How did the rate payers feel?

The tribal council is supportive of increased rates, but they know they need to make up for those revenues because the tribe is limited in its overall tribal revenues. From the ratepayers' standpoint, there had been a general lack of enforcement of payment, so the community was not

very responsive to the increases at first. More recently, as the utility started enforcing payments through water shut-offs, rates became a big political issue, and the utility is still addressing this at the tribal council level. The tribal council has listened to many concerns in the community, but they are not willing stop any billings or collections because they understand the reality of the utility's budget and that is it not sustainable to not enforce collections.

Are utility staff members of the tribe?

In the drinking water utility, one employee is a tribal member and one is not. In the solid waste program, both employees are tribal members.

Marta Burg: Are the rate increases based on a tribal members' ability to pay? Is the rate a flat rate, or a rate based on use?

Currently the community rate is based on a flat rate. The goal is to get to 1.5% of median household income based on the USDA Rural Development agreement. That is not a strict requirement, but a goal that was set for the tribe. If the rate increase proposed from this year going into next year is granted, the utility will be half of the way to the 1.5% goal. It is a step by step process for the utility. The utility also has additional rate increases related to the commercial vendors, some of which have metered rates.

Marta Burg: With the current rates or the potential rate increase, will the utility be 100% sustainable, and how will you make up the shortfall?

With the new rate increase the utility will not be 100% sustainable, but instead closer to 50%. John Mosley is not sure if the tribe will ever be 100% sustainable. Since the tribe is small it is not able to charge enough of a fee to be sustainable. John noted that there are not enough customers in the market to pay for <u>all</u> O&M needs. To become sustainable, the utility would have to charge people up to \$100 a month, and that would not be acceptable to members in the tribal community.

Marta Burg: Are there amounts dedicated by the tribal government to make up for the shortfall? The amount that the utility receives from the tribal council is part of the tribal council decision-making process, but there are other competing needs in the tribe such as language programs, recreational programs, and maintenance programs. There are many needs competing for the same limited resources as the water utility. John has argued to the tribal council that the needs from the water utility should be at the head of the line because the utility is providing clean drinking water to the community.

Sheila Frace: Regarding the establishment of a utility board, who comprises that board and what is their role?

The utility board is a policy making board that makes policies and recommendations to the tribal council. Ultimately, the tribal council accepts or amends the policies that are recommended to them by the utility board. They also listen to appeals from customers, such as disagreements about utility charges. The utility board is comprised of tribal members and there is one member from each community. The board meets monthly. Recently the board has been addressing concerns over the ordinances, and has set up a hearing schedule to listen to the concerns from the communities about the rate increase.

Kellie Kubena: Could you talk a little more about your septic services?

Last year the utility took over septic services over from the tribal housing authority. Until that point, the tribal housing authority was providing septic services with a small pump truck purchased with IHS project funding. Last year, the water and wastewater utility purchased a new truck with more capacity using funding from the utility and the housing authority. As a part of that deal, the water utility took over septic system services. The utility is still working through the fee schedule for providing septic services to households. Currently, septic services are only provided on an emergency basis. In the future, the utility would like to create a systematic approach that would have systems pumped every three years. This will ensure that systems are not overloaded, and also cut down on potential non-point pollution. Currently, there is a one-time fee of \$150 dollars to pump a system. The long-term goal is to have a voluntary pumping program where households pay a monthly fee of \$3.50 per month for on-going septic services.

Kellie Kubena: Is the information in your GIS system survey grade?

John replied the GIS system that was developed does not have survey grade information. It does contain some survey drawings from AutoCAD but most of the data are not survey grade.

Matt Richardson: Do you interact with any of the support organizations, such as RCAC (Rural Community Assistance Corporation in California) or the National Rural Water Association? The tribe has had minimal contact with these organizations and they have not provided any direct assistance.

<u>Jacki Ponti: Have you reached out to any of the organizations that provide assistance?</u>
The utility thought about asking for assistance in creating an asset registry. The utility has an outline and some major assets in the registry, but it does not have a detailed registry. The tribe could use assistance from some of the engineers at these organizations to develop a comprehensive asset registry. The other type of assistance that would benefit the tribe is in setting up tribal ordinances so that they are more enforceable.

Ben Shuman: Are there other sources of revenue besides the ones already mentioned? The utility uses tribal general funds and also indirect funds. A lot of the work that is provided for the tribal programs include water delivery needs. The utility made the argument in its indirect cost rate proposal to fund part of our program to help with the tribal program. This is not a widely used option, and John has not heard of any other tribes that implement that option.

E. Squaxin Island Tribe Water & Wastewater Utility - Potential Discussion Questions

1. Background on the Squaxin Island Tribal community (population size, commercial activities, etc.)

Margaret Foley has been the acting director of planning community and development for a week and a half, so may not have detailed and hands on information about the system. The tribe is located in rural Mason Count, Washington, but not on Squaxin Island despite its name. The tribe is located on about 26 acres that were purchased in 1965 and it contains the tribal government, the housing community, and tribal enterprises. The tribe has 1,034 members and about 60 live on or near the reservation. There are about 450 people that live in 141 tribal housing residences. Enterprise revenue for the tribe includes income from a casino, hotel, event center, a golf course,

tobacco manufacturing and distribution plant, gas stations, and convenient stores. Between the tribal government and enterprises, the tribe is the largest employer in Mason County with about 1,000 employees. The tribe employs 214 people, and its enterprises employ approximately 854 people.

2. How many tribal members receive drinking water and wastewater services from the tribal utility?

The water and wastewater system serves 309 tribal members and their families.

3. How many public water systems are operated and maintained by the tribe? Over how large a geographic area (i.e., distance between communities)?

The drinking water comes from wells. The utility operates one public wastewater system and the distance from the tribal community to the wastewater treatment plant is 2.4 miles.

4. How many community and/or individual (on-site) wastewater facilities are operated and maintained by the tribe?

Over the course of the years, the tribe has gone from individual homes with septic systems to a sequencing batch reactor (SBR) system and finally to a membrane bioreactor (MBR) wastewater treatment system.

5. How many tribal employees are assigned to the drinking water and wastewater utility? Do these employees have other responsibilities outside of maintaining the drinking water and wastewater facilities?

The water department has 2 ¾ full time equivalents (FTEs) that are involved in water and wastewater. It contracts with a water treatment plant operator. This is an expensive option for the tribe, but it is necessary since the tribe does not have staff with the required certification and licensing to operate a wastewater treatment plant.

6. What types of systems do you operate?

A membrane bioreactor (MBR) wastewater treatment system

7. What types of ordinances, laws, and or regulations (if any) are in place to allow the utility to operate? How does the utility interact with the Tribal Council?

The water and wastewater department is within the department of community development, and it has water and wastewater utility codes. The department is subject to the administration of the tribal administrator who reports to the tribal council.

8. What are the major challenges faced in the day-to-day operation of the utility?

Major challenges include asset management. The location makes it difficult to find people to work in the department. The department is looking to get some depth in the department by

training and hiring younger employees. Funding to plan for growth is a challenge. The tribe has grown quickly over the past few years because of the success of the casino. Consumer education is also an issue as well as funding for replacement parts, tools, and emergency equipment. Currently, the tribe pays a septic service to haul sludge away. The tribe is exploring different options to reduce that cost. The tribe wants to add a dryer to the system, but does not have funding for it.

9. What are the major successes with the current system?

The department has a robust system for the size of the tribe. The treatment system is expandable, but finding funding and resources to replace assets is a challenge. When it was initially constructed, the plan was to connect the MBR to the golf course so that grey water could be used for irrigation.

10. What steps is the utility taking to develop a governance structure?

The water and wastewater department does not have a governance structure. Tribal code calls for a utility commission, but a commission has not yet been formed. Within the last six months the department hired a civil engineer and part of his duties are to help establish a utility commission to get more autonomy from the tribal council. The commission will report to the tribal council, but the tribal council will be responsible for the decisions.

11. What factors are currently considered when setting user rates (e.g., salary cost, chemicals, energy, sampling, equipment replacement, ability to pay)?

The user rates are based on estimated average cost. This is one of the reasons the commission is needed to conduct a rate study to determine what should be charged.

12. Which federal infrastructure funding assistance programs has the utility tribe used?

The department has used several federal sources. It relies heavily on IHS for technical assistance and has received help from USDA to develop infrastructure. The tribe has also accessed EPA funding and Indian community development block grants.

13. What changes, if any, would you recommend making to federal infrastructure programs to assist tribes in developing a sustainable utility?

The tribe would like to see provisions in federal funding that allow for capital replacement. The tribe is able to build new infrastructure, but it is more difficult to fix things that are broken, or to plan for and set aside reserves.

Questions

Ben Shuman: When and how did you switch from SBR to MBR?

Margaret Foley was not with the tribe at that time and is not sure of the reason. It may have been connected to plans for expanding tribal enterprises since the SBR system is located in the

residential area, and the MBR system is closer to the casino and hotel.

<u>Jacki Ponti:</u> When funding for small repairs or larger ones, would you consider loans or only grants?

The department makes that decision based on the circumstance and the amount of money that is needed. The tribe has a great relationship with the USDA Olympia office and it would seek guidance on what options are available.

Kellie Kubena: Do you still have residences on septic systems?

No, everyone is connected to the sewer system

Matt Richardson: Would information on how other communities have developed utility commissions help you?

It would be helpful to have some guiding principles, pitfalls to avoid, and case studies.

Jennifer Bullough: How difficult was it to get everyone to switch from septic to a sewer system? Was that an issue with the residences?

Margaret is not able to answer the question since it was several years ago.

David Harvey: Are your collection rates high?

A shut-off policy is included in the code, but Margaret is unsure if it is enforced or not. The department read meters monthly, so people receive bills.

Kellie Kubena: Having a contract operator was more expensive, do you know how much more compared to a staff member?

The contract for the operator is about \$100,000 a year, and having staff may cost about half to two thirds of that amount. The contract has been in place since the tribe started operating the MBR.

Does the tribe have a permit that dictates sampling requirements?

Margaret believes so.

<u>Is the contractor responsible for taking samples from your drinking water system as well as your wastewater system?</u>

Yes.

F. Discussion, Commonalities with Previous Talks, and Preparation for the January call (All)

Sheila Frace invited the call participants to discuss some of the commonalities observed from previous presentations. The next step would be to use the January 18, 2012 meeting discuss these commonalities in more detail and the implications for the federal program, including what they do, how they operate, and how they might better incentivize sustainable solutions. In order to kick off this section, Sheila suggested creating a list of the commonalities to be discussed during the January call.

Sheila noted that independence of government is a common theme that has come up in one form or another in all of the presentations. This indicates there is recognition by tribes that in order to operate sustainably there has to be some level of independence. However, in some instances tribes do need ways to help supplement funding.

Jennifer Bullough stated that the issue of collections displays a commonality and a barrier. There is a drain on the resources when the collections efforts are high and it is also difficult for many of the tribes to take action on the collections. Some tribes did not have an issue with collection of payments, since they have a shut-off policy that is enforced.

John Mosley acknowledged that governance is a very important issue for tribes. To operate sustainably, the utility cannot be encumbered with the tribal government and its political issues. For example, the utility has exercised its water shut-off ability and used the local tribal court system to enforce non-paying customers. The customer refused to pay the full court ordered amount, and appealed to the tribal chairman since they were paying a portion of the amount and that they had a tribal elder and pregnant woman in the house. This customer was able to bypass the collection process of the utility because the utility is a part of the tribal government. This would not happen if the governance was separate. In order to be functional and enforce collection, politics must be removed.

Marta Burg noted that as the number of homes served decreases, and therefore the cost to operate a system on a per unit basis increases, there may be a greater difficulty to maintaining an expectation of sustainability based on rates alone. In Region 9, there are many tribal communities with as few as ten or fifteen homes on a system. A larger community with a larger rate base may be more able to operate sustainably than the smaller systems. As a result, identifying ways to assist with sustainability may be trickier with smaller systems.

One meeting participant noted that achieving economies of scale for small scale systems is an important question to answer.

John Mosley stated that some smaller California tribes have used casinos to absorb the costs of their infrastructure. For example, the casino pays for the central wastewater and drinking water facilities, instead of putting that cost on the community.

Margaret Foley commented that while tribes receive a revenue stream from the casino, what is used for water and sewer services limits the revenues that are available for the general fund. At the same time, it does direct those dollars directly to the water and wastewater system rather than getting the money from the general fund allocated by the council.

One meeting participant noted that there needs to be an acknowledgement that "fully sustainable" means that there are no funds coming from the federal government.

Another meeting participant identified the challenge finding and retaining staff as a commonality across multiple presentations.

Dana Baer mentioned that Margaret Foley nailed it when she noted the difference between the costs of an employed and contracted wastewater plant operator. The training is not the

deficiency, but rather the challenge to retain the operator if there are opportunities for that operator to go and work elsewhere.

Kellie Kubena added that one of the factors for staff retention is whether a tribe is able to provide resources for the operators to do their job, such as vehicles, tools, and information.

John Mosley agreed with the previous statement and added that it is important to operate a utility as a separate entity, to allow for more direct control to keep people on staff and give people the resources they need. If a utility can operate separately from the tribal government, this adds to the sustainability of the utility. John tries to act as buffer between employees and the tribal government to reduce constraints on employees.

G. Thank You & Next ITF Call (Sheila Frace)

Sheila thanked the call participants and noted that the next call is scheduled for January 18, 2012, from 2:00-3:30 p.m. Materials will be sent out on the presentations from the last few months to allow for a more focused conversation. In the coming calendar year, the ITF will report back on the work that the federal agencies are doing as it relates to the entire scope of the infrastructure task force. The ITF will then need to cycle back through some presentations and discussion with more focus on infrastructure and more of the technical aspects that were raised. More work will be needed on the technical aspect of infrastructure sustainability.

The following are the action items for the January 18, 2012 meeting.

- Review the meeting notes from the November 3, 2011 call and send any corrections to Matt Richardson.
- Participants should review the materials on the presentations from the last few months to allow for a more focused conversation during the January call.

Sheila Frace thanked all participants for their time and feedback.